NOTES ON THE POST-PLIOCENE MOLLUSCA OF THE MYLNE COLLECTION.

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A small collection of Post-Pliocene Mollusca formed by the late R. W. Mylne (whose Geological Map of London is so well known) is preserved in the British Museum (Natural History), and we are indebted to Dr. A. Smith Woodward for the opportunity of examining these specimens. Unfortunately, though all the examples are localized, and there is no difficulty in determining their age, we have been unable to trace details of some of the sections from which they were obtained.

The collection consists of three series from Shoeburyness, an extremely interesting set from St. James's Square, two series from Spring Gardens, Charing Cross, and a good number of species from Menchecourt and St. Acheul.

(1) "Shoeburyness Boring."

Bithynia tentaculata (Linn.).
Paludestrina ventrosa (Mont.).

Corbicula fluminalis (Müll.). Cardium edule, Linn.

(2) "Blue mud, Boring B, Shoeburyness."

Paludestrina ventrosa (Mont.).

Cardium edule, Linn.

(3) "Parsons Long Field, Shoeburyness; 14 feet mud with shells, bottom 3 feet mud and shells."

Paludestrina ventrosa (Mont.). Corbicula fluminalis (Müll.). Cardium edule, Linn.

These three series are evidently from the same deposit, and are undoubtedly of Pleistocene age. The examples of Corbicula fluminalis are small, and many of the examples still retain their periostracum. The brackish-water conditions as shown by the presence of Cardium edule may probably account for the dwarfing. Paludestrina ventrosa was not uncommon, and the examples are very similar to those found at Grays, but are rather smaller. The other species call for no comment.

"Spring Gardens, Charing Cross": Unio littoralis, Lamarck.
There can be no doubt that this example was obtained from the same beds that yielded to W. J. Lewis Abbott so varied a fauna.

¹ W. J. Lewis Abbott: "The Section exposed in the Foundations of the new Admiralty Offices," vol. xii (1892), pp. 346-356.

"Shells from the sands in St. James's Square."

Helicella itala (Linn.).
Hygromia hispīda (Linn.).
Succinea oblonga, Drap.
Linnæa palustris (Müll.).
L. pereger (Müll.).
Planorbis umbilicatus (Müll.).

Pl. spirorbis (Linn.).
Bithynia tentaculata (Linn.).
Valvata piscinalis (Müll.).
Pisidium amnicum (Müll.).
P. supinum, A. Schmidt.

This is an extremely interesting series from a Pleistocene deposit which belongs either to the third or the fourth terrace, and in all probability to the latter, and is of the same age as the beds at Spring Gardens. Succinea oblonga was fairly common, and the examples are often large; in fact, they are the finest we have seen from any deposit in these Islands. The specimens of Limnea palustris are rather small and slender, in marked contrast with the extremely fine specimens found at Spring Gardens. Pisidium supinum is an extremely interesting shell which we have evidence was living in the Thames Valley down to a very recent period.

"Spring Gardens, Charing Cross."

Limnæa pereger (Müll.). Plaworbis carinatus, Müll. Pl. Stroemii, West. Bithymia tentaculata (Linn.). Valvata piscinalis (Müll.). Neritina fluviatilis (Linn.). Sphærium rivicola (Leach). Sph. corneum (Linn.). Pisidium amnieum (Müll.). Unio tumidus, Retz.

Without doubt these shells came from a sandy bed of probably early Holocene age. An account of the Holocene beds at Spring Gardens has been given by Mr. Abbott.¹ Of these shells the most noteworthy is Sphærium rivicola, which is extremely rare in a fossil state in both the Holocene and Pleistocene. Planorbis Stroemii is another noteworthy species. It was not found by Mr. Abbott and did not occur at the New War Office, but was not uncommon at the Houses of Parliament and the New Scotland Yard.

"Base of sands, Menchecourt."

Jaminia muscorum (Linn.). Vallonia pulchella (Müll.). Hygromia hispida (Linn.). Limmæa percger (Müll.). Planorbis umbilicatus, Müll. Pl. carinatus, Müll. Pl. albus, Müll. Bithynia tentaculata (Linn.). Valvatu piscinalis (Müll.). Pisidium amnicum (Müll.).

"White sands, Menchecourt."

Vallonia pulchella (Müll.). Hygromia hispida (Linn.). Jaminia muscorum (Linn.). Limnæa pereger (Müll.). Planorbis spirorbis (Linn.). Bithynia tentaculata (Linn.). Pisidium amnicum (Müll.).

"Loess, Menchecourt."

Vitrea nitidula (Drap.). Hygromia hispida (Linn.). Clausilia bidentata (Ström.). Limnæa pereger (Müll.). Planorbis carinatus, Müll. Pisidium amnicum (Linn.).

¹ Loc. cit., p. 352

"Sands, St. Acheul."

Jaminia muscorum (Linn.).
Succinea oblonga, Drap.

Valvata piscinalis (Müll.). Pisidium amnicum (Linn.).

"Marly sands, St. Acheul."

Hygromia hispida (Linn.).

Succinea oblonga (Drap.).

S. putris (Linn.).

Planorbis spirorbis (Linn.). Pl. arcticus, Möller.

These five series are extremely interesting, since they are without doubt of the same age as the deposit at Swanscomb, Kent, which has yielded so abundant a fauna. Perhaps the most interesting form is Planorbis arcticus. This form, which is a near ally of P. glaber, Jeff., and P. parvus, Say, is known in a living state from West Greenland, Fort Chimo, Ungava, and Labrador in the New World, whilst as P. sibiricus, Dunk., it has been recorded from Siberia. It occurs not uncommonly in the Pleistocene of Crayford, whilst in Germany, as P. Rossmæsslerii, Aues, or P. sibiricus, Dunk., it has been recorded from the Pleistocene of Osterode Eckbolsheim near Strassburg, Hangenbeiten near Strassburg, Uichteritz near Weissenfels, and Halberstadt.

A. S. Kennard & B. B. Woodward, "The Post-Pliocene non-marine Mollusca of the South of England": Proc. Geol. Assoc., vol. xvii (1901), pp. 238, 239, and table.